RoughDeck®

Low Profile Floor Scale
SS, HE, HP, HP-H*, HC* and ALTRALITE**

Installation Manual

**utilizes economical junction box*

RICE LAKE®
WEIGHING SYSTEMS
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16960 Rev C

Contents

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1.0 Introduction

The RoughDeck® Floor Scales are fully electronic, low profile load receivers. The RoughDeck is available in sizes from 30 in x 30 in (.76 m x .76 m) to 96 in x 120 in (2.44 m x 3.05 m), and capacities from 2K- to 30K-lbs (1000–15000 Kg). The RoughDeck comes in several versions, including the stainless steel HE model designed for harsh washdown environments.

All models use four corner-mounted, FM-approved load cells, with the cells recessed into the frame channels for protection. A signal-trim summing board for any necessary corner corrections is enclosed in a junction box mounted on a slide-out tray for easy access. The stainless steel models use a stainless steel NEMA Type 4X junction box. Mild steel models feature the same board housed in a standard plastic junction box. All models come pre-trimmed, and corner corrections should not be necessary.

Load cell cables are enclosed in conduit through the main channels, and held down with replaceable cable ties near each corner, eliminating the possibility of cable damage in portable applications. Also useful for portable applications are threaded corner holes in the deck for removable eye bolts to allow lifting the scale from above with chains. Because of the possibility of foot and load cell damage from forklift tines, the scale should always be lifted from above with chains through the eye bolts.

The adjustable feet are used to allow leveling the scale to make up for minor floor irregularities. For permanent installations, two of the four feet can be held in place on the floor with optional floor mounting plates to guard against deck movement.

Other available options include custom frames for pit installations, and access ramps for all sizes and models of the RoughDeck. Decks designed for use in pits can be ordered with holes drilled in the deck directly above each foot for adjusting foot height with a screwdriver from above. See Section 4.4 on page 15 for replacement part and optional equipment part numbers.

1.1 Safety

Safety Symbol Definitions

DANGER *Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.*

WARNING *Indicates a potentially hazardous situation that, if not avoided could result in serious injury or death, and includes hazards that are exposed when guards are removed.*

CAUTION *Indicates a potentially hazardous situation that, if not avoided may result in minor or moderate injury.*

Important *Indicates information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.*

General Safety

Do not operate or work on this equipment unless you have read and understand the instructions and warnings in this manual. Failure to follow the instructions or heed the warnings could result in injury or death. Contact any Rice Lake Weighing Systems dealer for replacement manuals. Proper care is your responsibility.

WARNING

Before attempting to operate this unit, make sure every individual who operates or works with this unit has read and understands the following safety information.

Failure to heed may result in serious injury of death.

DO NOT allow minors (children) or inexperienced persons to operate this unit.

DO NOT operate without all shields and guards in place.

DO NOT jump on the scale.

DO NOT use for purposes other then weight taking.

DO NOT place fingers into slots or possible pinch points.

DO NOT use any load bearing component that is worn beyond 5% of the original dimension.

DO NOT use this product if any of the components are cracked.

DO NOT exceed the rated load limit of the unit.

DO NOT make alterations or modifications to the unit.

DO NOT remove or obscure warning labels.

DO NOT use near water.

Before opening the unit, ensure the power cord is disconnected from the outlet.

Keep hands, feet and loose clothing away from moving parts.

1.2 Model Designations

The model identification plate is located on the side of the frame next to the slide-out junction box tray. Include both model number and serial number when ordering replacement parts.

The following model designations are used to describe the different scale versions:

- **HP** — Mild steel, high precision, NTEP-certified as "legal-for-trade" and FM-approved load cells.
- **HP-H** — 20K- and 30K-lb capacity HP models.
- **SS** — Non-washdown stainless steel, NTEP-certified model, for dry chemical and corrosive environments.
- **HE** — Washdown stainless steel, external mounted, NTEP-certified model with hermetically-sealed load cells and NEMA Type 4X J-box for hostile environments.

1.3 Operating Requirements

Electrical Grounding

For systems where the scale is connected to a 115 VAC circuit, the indicator must be directly connected to an earth ground with a ground interface cable of no more than 3Ω resistance throughout its length.

Load Cell Excitation

Rated Excitation: 10 VDC, Maximum Excitation: 15 VDC

Grade Level Requirements

The supporting surface for the four feet of the scale must be level within $^{1}/_{4}$ in. of horizontal.

Safe Static Overloading Capacity

Maximum: 150% of scale capacity

Nominal Scale Height

2K–10K lb (1000–5000 Kg) models: 3.5 in (89 mm)

20K lb (10000 Kg) models: 4.0 in (102 mm)

30K lb (15000 Kg) models: 5.0 in (127 mm)

2.0 Installation

2.1 Overview

Standard installation of the *RoughDeck* floor scale consists of the following steps:

1. Select a site
2. Check levelness and smoothness of site
3. Unpack scale
4. Adjust the four feet on the scale
5. Install mounting plates to the floor
6. Connect cable from junction box to indicator
7. Calibrate the unit

Pit installations and access ramps are described in Section 2.6 and Section 2.7.

2.2 Site Preparation

Location

Important ***The scale must not be loaded beyond its capacity, even momentarily.***

- Select a site where overweight loads can maneuver easily without crossing the platform.
- Avoid areas where damage could occur from side impacts of wheels or forklift tines.
- Avoid areas where falling objects could cause shock damage.
- Avoid areas where water may damage a scale not meant for a washdown environment.
- The scale must be level within 1/4 inch. Choose a site where the floor is level to this standard to avoid excessive shimming. The floor may require modification if unable to select and area up to standard.

Cabling

The interface cable between the scale and the indicator must be protected against crushing, cutting, or moisture damage.

Important ***If the chosen site has such potential dangers, some method of protection, such as running the cable in conduit, will be required.***

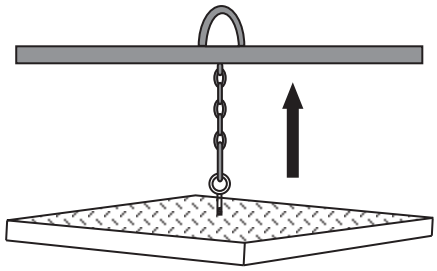
2.3 Unpacking

Remove all packing material and inspect scale for visible damage caused during shipment.

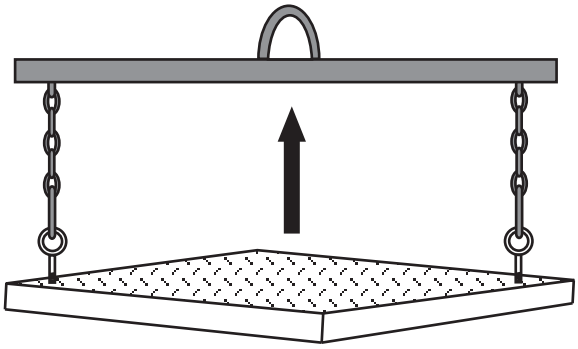
All *RoughDeck* models have threaded holes in the deck to allow installation of eye bolts with shoulders for use when lifting the scale with chains or using a spreader bar.

Important *Lift the scale only with a properly designed spreader bar as shown in Figure 2-1. Lifting force must be vertical to avoid bending the eye bolts.*

WARNING *Eye bolts must always be inserted into the top of the scale. Lifting should always occur with the top plate facing up and the eye bolts securely attached through the nuts welded to the bottom side of the top plate. Lifting from the bottom of the plate could cause nuts to break loose and the scale to fall.*



Small Platform
(5′ x 5′ or smaller and/or 10,000lb or less capacity)
Use one 1/2″ eye bolt, insert into threaded hole in center of top plate for lifting.



Large Platform
(Larger then 5′ x 5′, and /or more than 10,000lb capacity)
Use two 3/4″ eye bolts, insert into threaded holes in opposite corners of top plate for lifting.

Figure 2-1. Proper Lifting Technique

2.4 Assembly

The following sections describe the assembly of the various component parts of the *RoughDeck* scale.

2.4.1 Installing and Adjusting Feet

For load cell protection during shipping, the scale feet are shipped detached from the load cells. The feet are secured to the bottom of the shipping pallet along with the load cell cable, strain relief fitting, and product literature.

1. Remove all parts from the envelope.
2. Screw one foot into each load cell and turn all the way in until the foot touches either the load cell or the underside of the deck.
3. Unscrew each foot three complete turns.
4. Place a spirit level on the deck.
5. Adjust any corners that do not contact the floor by unscrewing the feet on those corners until they just contact the floor surface.
6. When all feet are in contact with the floor, check the deck with the spirit level to be sure the scale is within 1/4 inch of level.

2.4.2 Mounting Plate Installation

For permanent applications, the scale should be secured to the floor to prevent sideways movement. Two mounting plates, with holes that slightly exceed the foot diameter, are available as an option for that purpose.

Lift the scale so that the feet are approximately one inch off the floor. Slide mounting plates under two diagonally opposed feet. Lower the scale back to the floor, and position the plates as shown in Figure 2-2 so that the boltdown holes are accessible from above.

Using the mounting plates as templates, drill pilot holes into the floor for suitable anchor bolts. Bolt the plates to the floor using $^{1}/_{2}$-in anchor bolts ($^{3}/_{4}$-in bolts for 20K and 30K-lb capacity scales). Recheck foot adjustment and deck level after this operation.

For installations using access ramps, mounting plates are not necessary as the ramps have built-in mounting plates to secure the scale feet

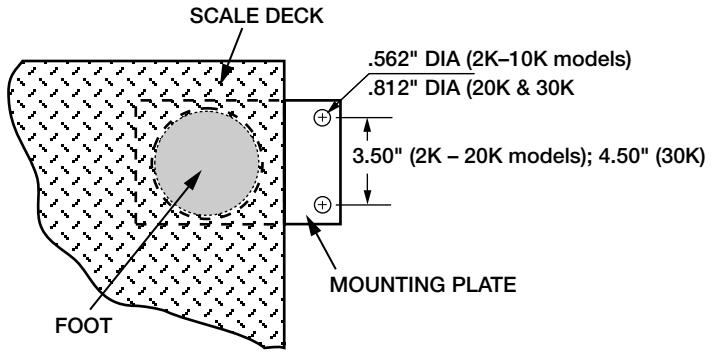


Figure 2-2. Mounting Plate Installation

2.5 Electrical Interface to the Indicator

Twenty feet of 6-wire cable to connect the scale to the weight indicator is supplied with each scale.

NEMA Type 4X

If your scale uses the NEMA Type 4X junction box, push one end of this cable into the junction box through the strain relief bushing hole in the tray. Connect the wires to the INDICATOR terminal (shaded area of Figure 2-3) as shown in the load cell specifications. Pull out excess and tighten the strain relief bushing to hold the cable snugly.

Standard Junction Box

If using the standard junction box, put the cable through the hole in the junction box tray. Slide the two parts of the strain relief flex fitting onto the cable with the threaded piece inside the faceplate and the flexible spiral portion to the outside. Push the cable end into the junction box and connect the wires to the INDICATOR terminal. Pull out excess cable and tighten the two parts of the strain relief flex fitting to hold the cable snugly.

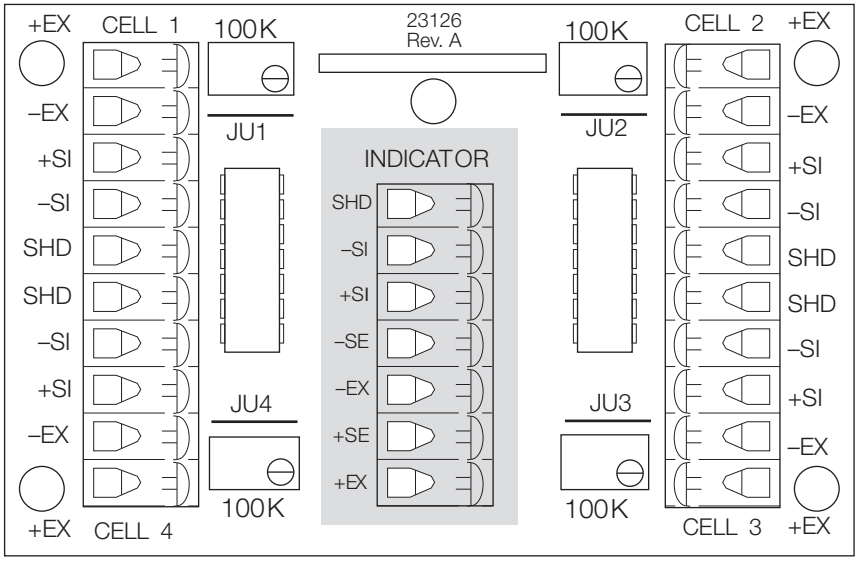


Figure 2-3. Junction Box Indicator Terminal

The cable must be routed to the indicator in a manner that will protect the cable from damage. Two methods of cable protection in non-washdown applications are shown in Figure 2-4. When planning cable routing with either of these two methods, leave a loose coil of excess cable under the scale to facilitate future lifting of the scale for servicing or cleaning.

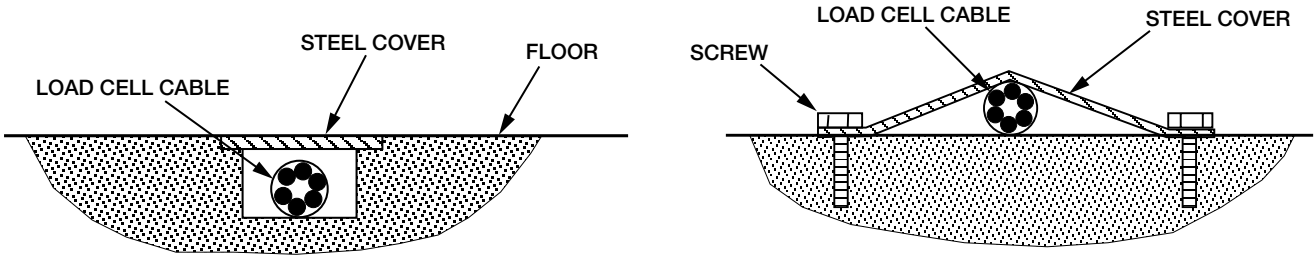


Figure 2-4. Cable Protection

Note ***In washdown applications, we recommend removing the junction box entirely from the floor platform and mounting it externally on a wall or in some other protected location.***

When the interface cable is protected and in its final position, complete connections to the indicator.

See indicator installation manual for wiring information.

1. If necessary, trim corners as described in Section 3.2.
2. Check all strain relief fittings for tightness.
3. Screw on the junction box cover.
4. Slide the junction box tray into the cutout.
5. Secure it with the two #10 x 3/8" screws provided.

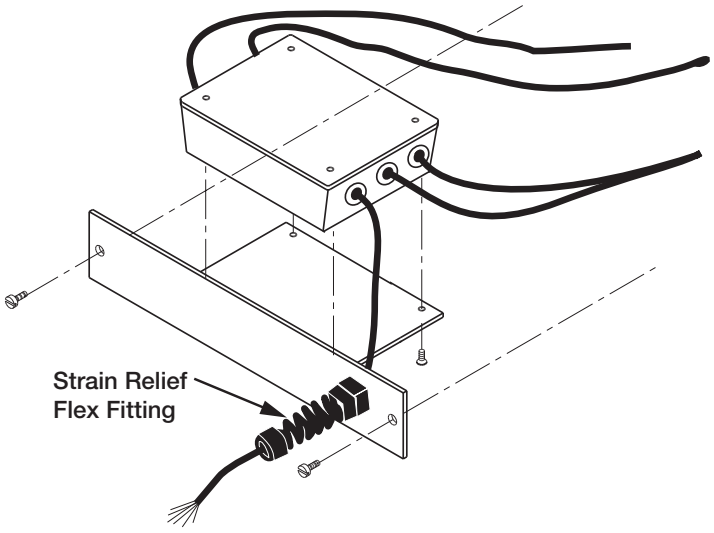


Figure 2-5. Standard Junction Box

2.6 Pit Installation

All RoughDeck models can be installed in a shallow pit using the optional RoughDeck Pit Frame. Optional height-adjustment holes are available. The following site considerations and pit frame drawings are meant only as a brief overview of the principles involved with mounting the scale in a floor-level pit. The pit must be installed in a suitable poured-concrete foundation according to standard construction practices.

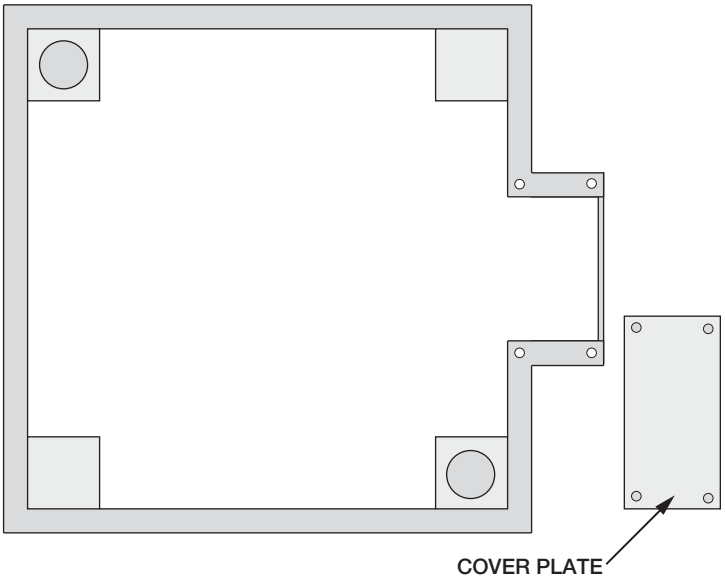


Figure 2-6. Heavy Capacity Pit Frame (Top View)

Site Considerations

Debris, floor sweepings, or material spills may accumulate in the pit and interfere with scale operation, periodically clean the pit. All RoughDeck models have threaded holes for eye bolts so the scale can be easily lifted from the pit.

Weight overloads, even momentary ones such as driving a loaded forklift over a scale corner, will damage load cells. Plan the pit location away from main traffic areas to prevent accidental damaging overloads.

In washdown applications using HE models, the pit floor must slope to a center drain with sump or sewer connections.

A 1:24 slope is recommended for the pit, with full grouting under the corner pads as shown in Figure 2-7.

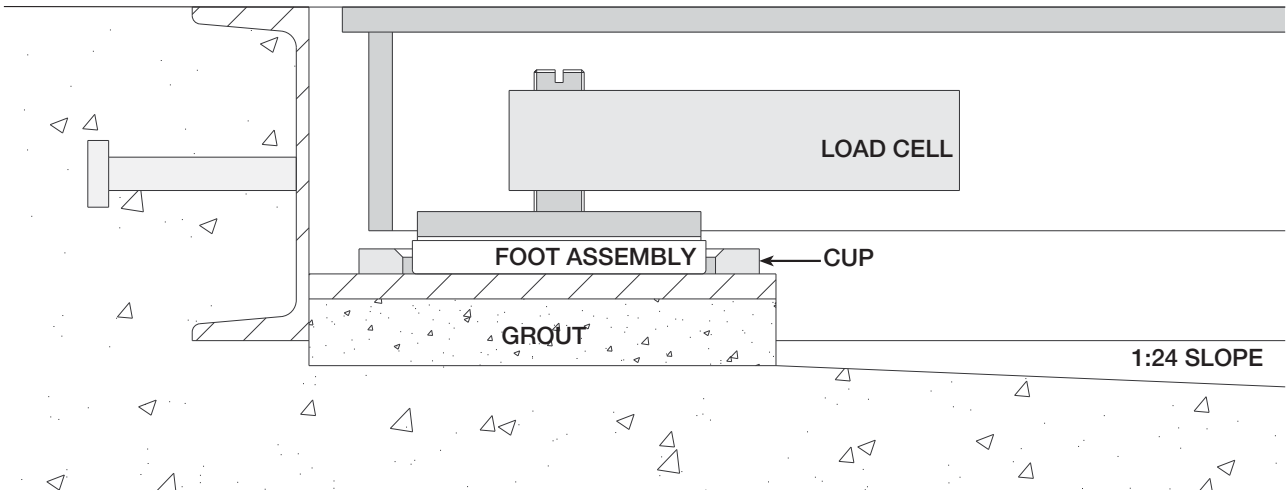


Figure 2-7. Heavy Capacity

Note ***Corner pads must be fully grouted.***

2.7 Access Ramps

Access for *RoughDeck* floor scales are designed to bolt to the floor, with built-in mounting plates that attach to the scale feet. When used with access ramps, side movement of the scale is automatically eliminated, and no other mounting plates are necessary.

Access ramps can only be attached to the scale on one of the two scale sides that are perpendicular to the longitudinal axis of the load cells. For example, the scale shown in Figure 2-8 could have an access ramp on the left side, and/or on the right side. The top and bottom sides, however, will not accept the ramp mounting plates.

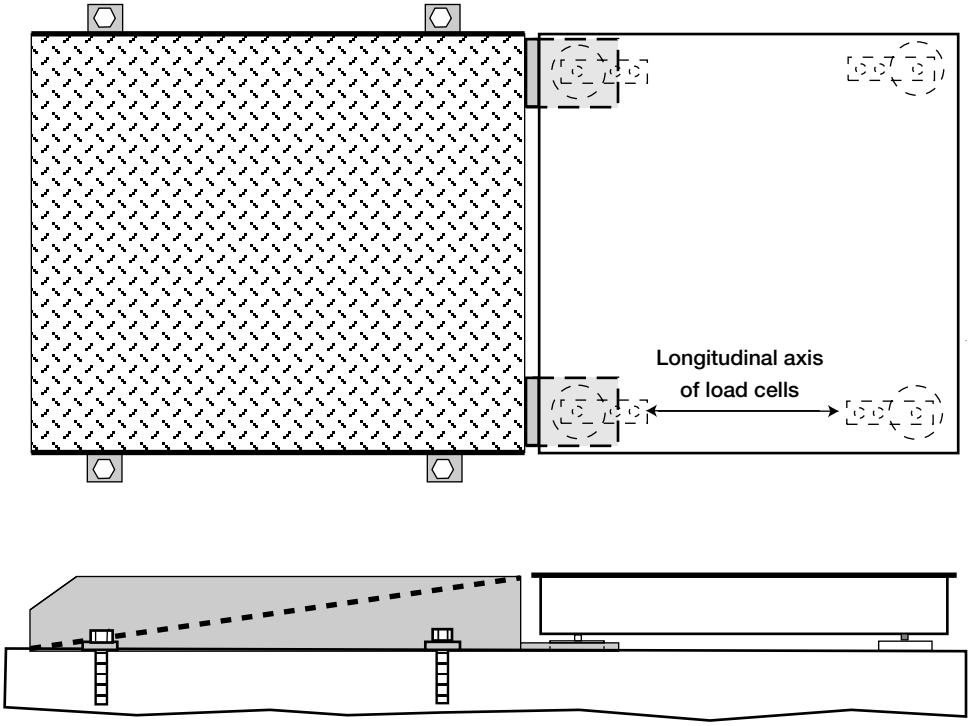


Figure 2-8. Optional Access Ramps

See Table 4-2 and Table 4-3 on page 16 for information about available access ramps.

3.0 Adjustments and Calibration

3.1 Mechanical Adjustments

To accommodate minor floor unevenness, scale feet can be used to adjust scale height up or down a fraction of an inch.

No jam nuts are supplied for locking the feet, as there is a slight decrease in accuracy when jam nuts are tightened. However, if the application being used requires jam nuts to secure the feet, they may be added. The feet will have to be unscrewed beyond the minimum height to allow room for the jam nuts between the foot pads and the load cells.

Adjust the Feet

1. Lift the scale corner slightly with a pry bar at the foot that needs adjustment.
2. Turn the foot until it is contacting the floor
3. Repeat as needed until all feet are contacting the floor equally.
4. When height adjustments are complete, recheck level of the deck with a spirit level. The deck must be level within 1/4".

Important ***When adjusting scale feet, use care to prevent scale foot from bottoming out against the underside of the load cell. Also, the foot stem may be damaged by bending or stripping threads if extended beyond the maximum height adjustment.***

3.2 Corner Corrections

To calibrate the scale, the output from each load cell must be matched by adjusting the signals with potentiometers at the junction box, a process known as trimming.

All assembled *RoughDeck* scales are delivered with the junction box corner-trimmed. Corner trimming is only necessary after replacing a load cell.

The indicator must be connected and calibrated approximately, it does not need to indicate the exact weight value. A test weight will be required, recommended test weight for all *RoughDeck* models is 25% of scale capacity.

Example: 500 lbs for 2K-lb models, 5000 lbs for 20K-lb models.

1. Remove the junction box cover and identify the correct load cell terminal corresponding to each corner (labeled CELL 1, CELL 2, and so on). See Figure 4-4 on page 14 for scale deck corner numbering.
2. With no weight on the scale, zero the indicator.
3. Turn all four potentiometers (shaded areas of Figure 3-1) to increase the reading until a clicking sound is heard from each potentiometer. This ensures the maximum signal from each load cell.
4. Place the test weight over one corner and record the indicated weight.
5. Repeat the process for each of the other three corners. The load cell with the lowest corner reading will be used as a reference point and will not be trimmed.

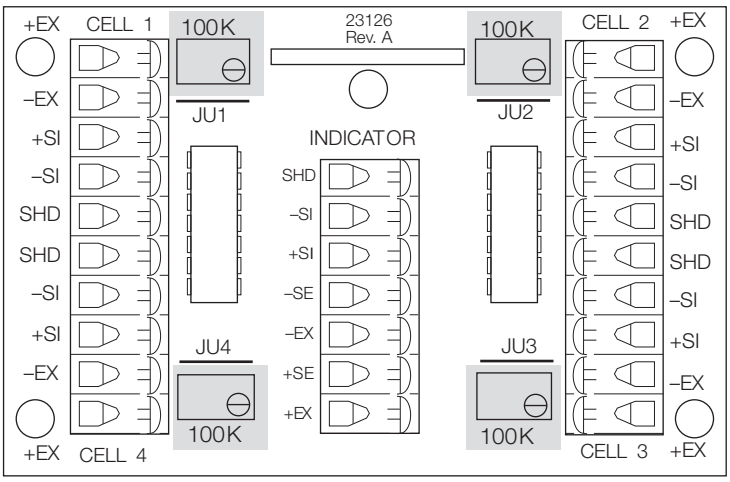


Figure 3-1. Trim Potentiometers

6. Place the test weight over one of the other three corners and use that load cell's potentiometer to adjust the load cell output down to the reference cell output.
7. Repeat this procedure with the other two high corners.

Adjustments are somewhat interactive, and adjusting the three higher outputs may affect the reference cell output, especially in smaller scale decks. Rezero the indicator and repeat the test until all corners read within ±.1% of the test weight used.

3.3 Calibration Procedure

Refer to the indicator manual to determine correct calibration procedures.

It is recommended that the scale be *exercised* before calibration to be certain that everything is seated.

1. Load the scale to near capacity two or three times.
2. With no load on the scale, place the indicator in its calibration mode and perform a zero calibration.
3. Place test weights on the platform equal to 70% - 80% of the scale's capacity. If several weights are used, they should be evenly distributed around the platform.
4. Perform a span calibration.
5. Remove the test weights and check the zero reading.
6. Repeat the calibration process if necessary.

4.0 Service information

4.1 Troubleshooting Guide

System Does not Operate—no Display

- Power disconnected: *Check and reconnect.*
- Indicator fuse blown. *Replace fuse. Check for cause.*
- Interface cable cut or disconnected: *Repair.*
- Signal leads incorrectly installed at indicator: *Install according to indicator installation manual*

Display Stays at Zero

- Indicator faulty: *Service indicator*
- Load cell connections faulty: *Check cable connections in junction box and at indicator*

Erratic Weighs

- Vibration near scale: *Remove source of vibration or move scale.*
- Platform not level to within $^{1}/_{4}$ in: *Level scale by adjusting feet or shimming if necessary.*
- Load cell or cable water damage: *Replace.*
- Debris under load cells or platform: *Clean.*
- Indicator faulty: *Use simulator to test indicator for stability. Service indicator.*

Consistently High or Low Weights

- Indicator not properly adjusted to zero: *Zero the indicator according to indicator manual.*
- Platform binding: *Obtain adequate clearance for free platform movement.*
- Indicator not calibrated: *Calibrate according to indicator manual and Section 3.3 on page 11.*
- Load cells faulty: *Test and replace load cells if necessary.*
- Feet touching deck underside: *Adjust feet downward to provide clearance.*

4.2 Periodic Maintenance

The space between the platform side and pit frame, and the surface beneath the platform must be periodically cleaned to prevent debris build up. More frequent cleaning of these areas is necessary with scales mounted in pits.

Important ***Do not attempt to use scales with load cells that are not hermetically sealed in washdown applications. Water damage is a common cause of failure in non-hermetically-sealed load cells***

Use care with high pressure steam washdowns for hermetically-sealed load cells. The steam may not damage the load cells, but the elevated temperatures may cause incorrect readings until the unit cools to room temperature.

4.3 Load Cell Replacement

Remove Load Cell

1. Lift scale with chains and proper spreader bar, see Section 2.4 on page 5.
2. Remove defective load cell
3. Remove foot from load cell.
4. Disconnect load cell cable from junction box and cut cable ties.
5. When the cable is freed, pull cable out of the scale frame channels.

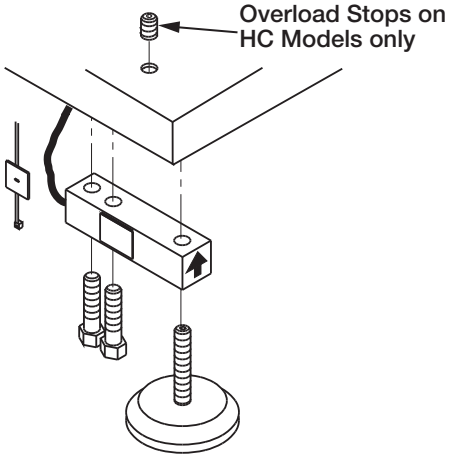


Figure 4-1. Load Cell Assembly

Install Load Cell

For Canadian HC models, overload stops should be loosened two full turns before installing new load cells. To reset overload stops after load cell installation, place a weight equal to 25% of the load cell capacity on the affected scale corner. Screw in the overload stop until the indicator reading changes. Then back off the overload stop 1/6 turn. Repeat for each corner where the load cell has been changed.

1. Set the new load cells near the corners where they are to be installed.
2. Thread the cable from each load cell through the conduit tubing in the frame to the junction box according to the wiring diagram in Figure 4-2.

Note ***Figure 4-2 shows both the scale and the junction box as viewed from the bottom. To verify correct load cell/junction box terminal matching, see the numbers on the terminals inside the junction box and the corner numbering diagram in Figure on page 14.***

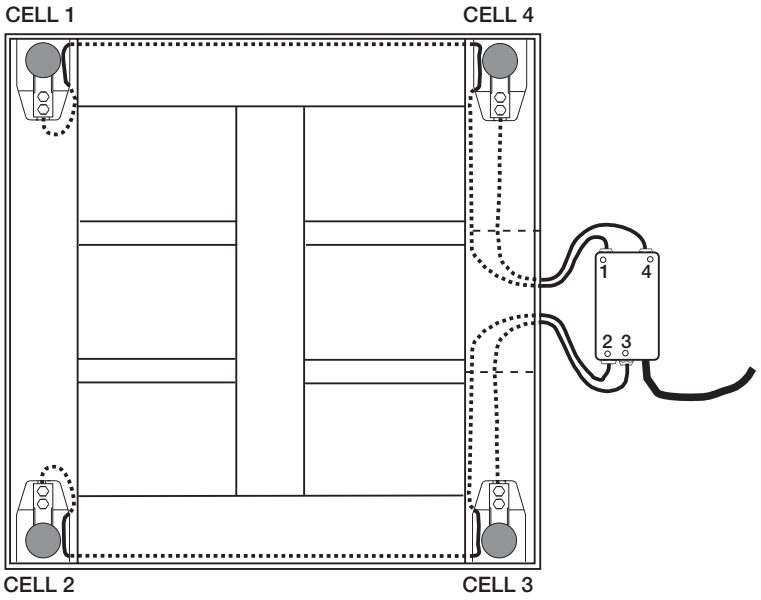
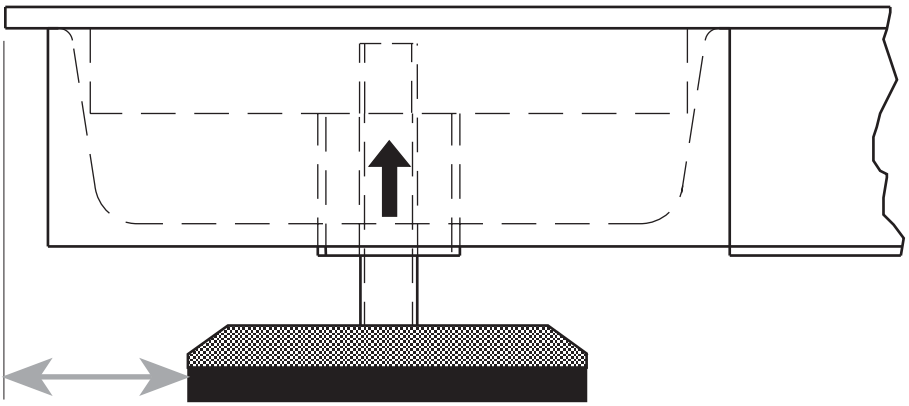


Figure 4-2. Bottom View of Scale (with Plastic Junction Box)

3. Check that the threaded holes for the load cell screws are free of debris, use compressed air to blow out holes if necessary.
4. Position load cells with alignment arrows pointing up toward the deck and loosely install the hex head cap screws provided, as shown in Figure 4-3.

Note ***If the base is used with a pit frame or access ramp, position the load cell to maintain the dimension shown in Figure 4-3.***

5. With the torque wrench, tighten all bolts as follows:
   - 2K- 10K - lb capacities: Torque to 75 ft-lbs.
   - 20K-lb and 30K-lb capacities: Torque to 250 ft-lbs.



2K – 10K models: 1.625"
20K models: 2.16"
30K models: 1.66"

Figure 4-3. Foot Pad - Side View

6. Route the load cell cables near each corner so that the cable is free from possible contact with each foot.
7. Hold the cable in position with the adhesive-backed cable ties supplied in the hardware kit.
8. **Do not cut load cell cables**. Coil extra cable before it enters the junction box, tie with cable ties, and insert the coils into the channel near the junction box.
9. Pass each individual end of load cell cable through its grommet in the junction box cover (or through cable fittings in the NEMA Type 4X junction box).
10. Corner correction trimming and calibration is necessary after load cell replacement. Follow instructions in Section 3.2 and Section 3.3 on page 11.

4.3.1 Load Cell Wiring to the Junction Box

The four load cells are each wired to their respective terminals in the junction box according to the corner numbering system shown in Figure 3, and the coloring code in the load cell specifications.

When using the NEMA Type 4X stainless steel junction box with strain relief hubs,

1. Pull excess cable out of the junction box enclosure.
2. Tighten the strain relief hubs with a wrench.
   To be watertight, the hubs must be tightened to the point where the rubber sleeving begins to protrude out of the hub.
3. Pull on each of the four cables to make sure that do not slip.

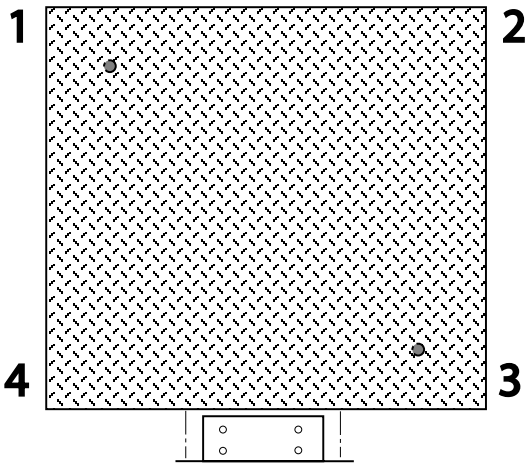


Figure 4-4. Corner Numbering - Top View

Note *See load cell specifications for proper color code wiring information.*

4.4 Replacement Parts List and Accessories

The following tables list the pit frames, access ramps, and replacement part numbers for HP, HC, HE, SS, and HP-H model *RoughDeck* floor scales.

4.4.1 Pit Frames

Table 4-1 shows the pit frames available for RoughDeck floor scales.

Platform Size		Pit Frame for Model			
ft	m	HP/HC	HE/SS	HP-H 20K	HP-H 30K
2.5 x 2.5	.76 x .76	18757	18758		
3 x 3	.92 x .92	18759	18760		
4 x 4	1.22 x 1.22	18761	18762	39595	39608
4 x 5	1.22 x 1.53	18765	18766	39596	39609
4 x 6	1.22 x 1.83	18767	18768	39597	39610
4 x 7	1.22 x 2.13			39598	39611
5 x 5	1.53 x 1.53	18763	18764	39599	39612
5 x 6	1.53 x 1.83	18769	18770	39600	
5 x 7	1.53 x 2.13	18771	18772	39601	39614
6 x 6	1.83 x 1.83			39602	39615
6 x 8	1.83 x 2.44			39604	
7 x 9	2.13 x 2.74			39605	
7 x 10	2.13 x 3.05			39606	39619
8 x 10	2.44 x 3.05			39607	39620

Table 4-1. RoughDeck Pit Frames

4.4.2 Access Ramps

Table 4-2 shows the standard access ramps available for 2K-10K lb capacity RoughDeck scales.

Ramp Width x Ramp Approach Length x Ramp Height		Access Ramp for Model	
ft x ft x inch	m x m x mm	HP/HC	HE/SS
2.5 x 3 x 3.5	.76 x .92 x 89	18779	18780
3 x 3 x 3.5	.92 x .92 x 89	18781	18782
4 x 3 x 3.5	1.22 x .92 x 89	18783	18784
5 x 3 x 3.5	1.53 x .92 x 89	18785	18786
2.5 x 4 x 3.5	.76 x 1.22 x 89	18789	18790
3 x 4 x 3.5	92 x 1.22 x 89	18791	18792
4 x 4 x 3.5	1.22 x 1.22 x 89	18793	18784
5 x 4 x 3.5	1.53 x 1.22 x 89	18795	18796

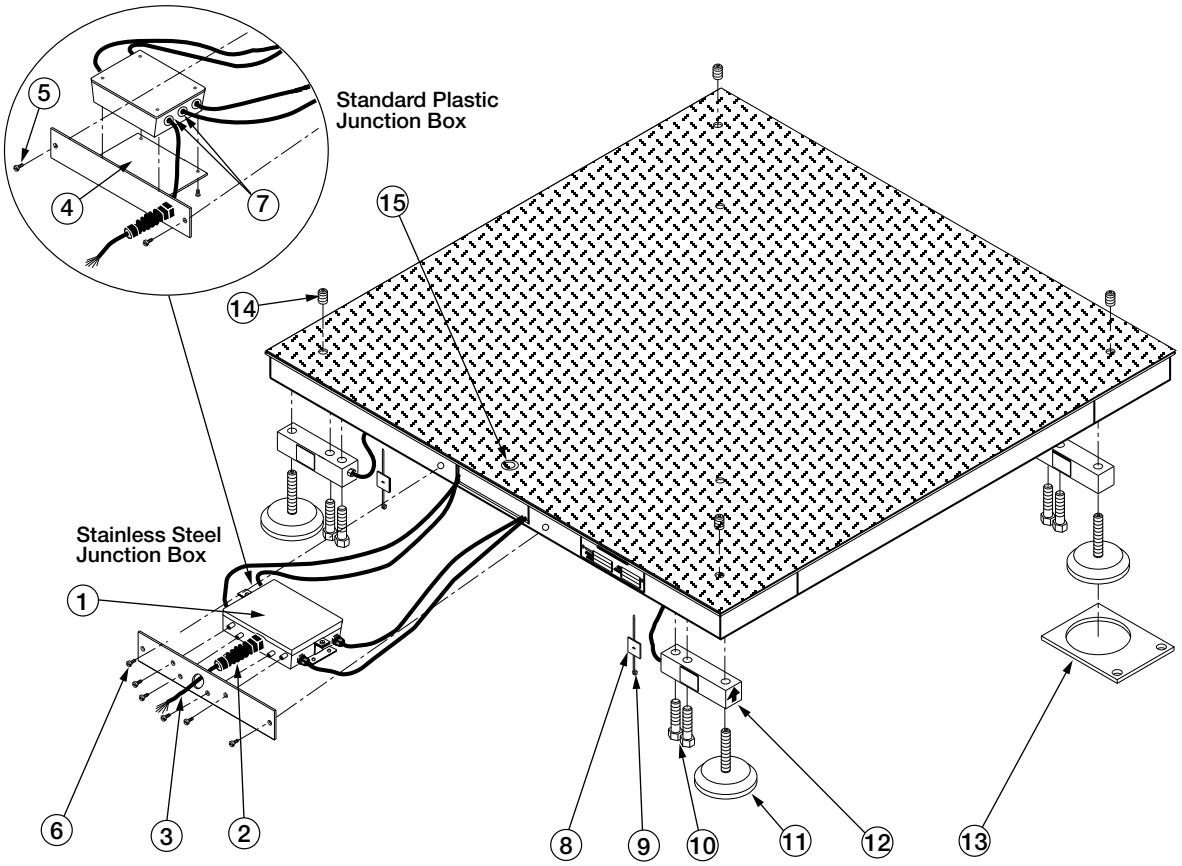
Table 4-2. RoughDeck Access Ramps (2K - through 10K-lb Models)

Table 4-3 shows the standard access ramps available for 20K and 30K lb capacity RoughDeck scales (HP-H models)

Ramp Width x Ramp Approach Length x Ramp Height		Access Ramp for Model	
ft x ft x inch	m x m x mm	HP-H 20K	HP-H 30K
4 x 4 x 4	1.22 x 1.22 x 102	39585	
5 x 4 x 4	1.52 x 1.22 x 102	39586	
6 x 4 x 4	1.83 x 1.22 x 102	39587	
7 x 4 x 4	2.13 x 1.22 x 102	39588	
8 x 4 x 4	2.44 x 1.22 x 102	39589	
4 x 5 x 5	1.22 x 1.52 x 127		39590
5 x 5 x 5	1.52 x 1.52 x 127		39591
6 x 5 x 5	1.83 x 1.52 x 127		39592
7 x 5 x 5	2.13 x 1.52 x 127		39593
8 x 5 x 5	2.44 x 1.52 x 127		39594

Table 4-3. RoughDeck Access Ramps (20K - 30K-lb Models)

4.4.3 Replacement Parts List and Accessories



Item No.	Part No.	Description
1	21172 21173	Junction box, standard plastic - 4 channel, signal trim (HP/HP-H - H/HC models) Junction box, NEMA Type 4X - 4 channel, signal trim (SS and HE models)
2	26087	Strain relief flex fitting (HP/HP-H - H/HC models)
3	15611	Cable, 6-wire, deck to indicator
4	26320	Junction box tray (HP/HP-H - H/HC models)
5	14876	Junction box tray screw (HP/HP - H/HC models)
6	14908	Junction box tray screw (SS and HE models)
7	15398 15377	Rubber grommet, load cell cable (HP/HP-H/HC models) Rubber grommet, deck to indicator cable (HP/HP-H-H/HC models)
8	15658	Cable tie mount, 1” square
9	15631	Cable ties, 3”
10	15071 15075 40337	Load cell screw, (HP/HC models) Load cell screw, (SS and HE models) Load cell screw, (HP-H model)
11	18756 39021 39022	Foot assembly (HP/HC, SS and HE models) Foot assembly (20K HP-H model) Foot assembly (30K HP-H model)
12	Consult factory for replacement parts	Load cells
13	18777 18778 40387 40388	Mounting plate, HP and HC models, set of two plates (optional) Mounting plate, SS and HE models, set of two plates (optional) Mounting plate, 20K HP-H models, set of two plates (optional) Mounting plate, 30K HP-H models, set of two plates (optional)
14	15051	Overload stops (HC Canadian legal-for-trade models only)
15	15410	Bubble level (HC Canadian legal-for-trade models only)

Table 4-4. Replacement Parts List

RoughDeck Limited Warranty

Rice Lake Weighing Systems (RLWS) warrants that all RLWS equipment and systems properly installed by a Distributor or Original Equipment Manufacturer (OEM) will operate per written specifications as confirmed by the Distributor/OEM and accepted by RLWS. RoughDeck fabricated platforms and weldments are warranted against defects in materials and workmanship for five (5) years. Load cells and all other components are warranted for two (2) years.

RLWS warrants that the equipment sold hereunder will conform to the current written specifications authorized by RLWS. RLWS warrants the equipment against faulty workmanship and defective materials. If any equipment fails to conform to these warranties, RLWS will, at its option, repair or replace such goods returned within the warranty period subject to the following conditions:

- Upon discovery by Buyer of such nonconformity, RLWS will be given prompt written notice with a detailed explanation of the alleged deficiencies.
- Individual electronic components returned to RLWS for warranty purposes must be packaged to prevent electrostatic discharge (ESD) damage in shipment. Packaging requirements are listed in a publication, "Protecting Your Components From Static Damage in Shipment," available from RLWS Equipment Return Department.
- Examination of such equipment by RLWS confirms that the nonconformity actually exists, and was not caused by accident, misuse, neglect, alteration, improper installation, improper repair or improper testing; RLWS shall be the sole judge of all alleged non-conformities.
- Such equipment has not been modified, altered, or changed by any person other than RLWS or its duly authorized repair agents.
- RLWS will have a reasonable time to repair or replace the defective equipment. Buyer is responsible for shipping charges both ways.
- In no event will RLWS be responsible for travel time or on-location repairs, including assembly or disassembly of equipment, nor will RLWS be liable for the cost of any repairs made by others.

THESE WARRANTIES EXCLUDE ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEITHER RLWS NOR DISTRIBUTOR WILL, IN ANY EVENT, BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

RLWS AND BUYER AGREE THAT RLWS' SOLE AND EXCLUSIVE LIABILITY HEREUNDER IS LIMITED TO REPAIR OR REPLACEMENT OF SUCH GOODS. IN ACCEPTING THIS WARRANTY, THE BUYER WAIVES ANY AND ALL OTHER CLAIMS TO WARRANTY.

SHOULD THE SELLER BE OTHER THAN RLWS, THE BUYER AGREES TO LOOK ONLY TO THE SELLER FOR WARRANTY CLAIMS.

No terms, conditions, understanding, or agreements purporting to modify the terms of this warranty shall have any legal effect unless made in writing and signed by a corporate officer of RLWS and the Buyer.

RICE LAKE WEIGHING SYSTEMS • 230 WEST COLEMAN STREET • RICE LAKE, WISCONSIN 54868 • USA

For More Information

Contact Information

Hours of Operation

Knowledgeable customer service representatives are available 6:30 a.m. - 6:30 p.m. Monday through Friday and 8 a.m. to 12 noon on Saturday. (CST)

Telephone

- Sales/Technical Support 800-472-6703
- Canadian and Mexican Customers 800-321-6703
- International 715-234-9171

Immediate/Emergency Service

For immediate assistance call toll-free 1-800-472-6703 (Canadian and Mexican customers please call 1-800-321-6703). If you are calling after standard business hours and have an urgent scale outage or emergency, press 1 to reach on-call personnel.

Fax

Fax Number 715-234-6967

E-mail

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